REMARKS

Favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

I. CLAIM STATUS

Claims 1-4 and 7-18 are pending and stand rejected.

This response must be entered and considered after final rejection. The claims have not been amended. Therefore, there is nothing that would require further consideration and/or search, and hence no ground for refusing entry to this amendment.

Applicant thanks the Examiner for the careful examination of this case and respectfully requests reconsideration of the case. Below Applicant addresses the rejections in the Office Action and explains why the rejections are not applicable to the pending claims.

II. OBVIOUSNESS REJECTIONS

Claims 1-4, 7-9, and 13-16 were newly rejected under 35 U.S.C. § 103(a) as being obvious over BERGER (U.S. 5,586,861) in view of HOAGUE (U.S. 6,186,140) for the reasons on pages 2-7 of the Office Action.

Claims 10-12 and 17-18 were newly rejected under 35 U.S.C. § 103(a) as being obvious over BERGER in view of HOAGUE in further view of JENSEN (U.S. 4,821,709) for the reasons set forth on pages 8-9 of the Action.

It is noted that BERGER is newly cited and is used as the primary reference for each rejection.

The rejections are respectfully traversed and will be discussed together below.

It is well established that to support a *prima facie* case of obviousness, the Office must provide a rationale showing that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions to yield predictable results. KSR International Co. v. Teleflex Inc., 550 U.S. ___, ___, 127 S. Ct. 1727, 82 U.S.P.Q.2d 1385, 1395 (2007); and M.P.E.P., Eighth Ed., Rev. 6 (September 2007) at § 2143.02.

In the instant case, Applicant respectfully submits that the rejections fail, because neither BERGER, HOAGUE nor JENSEN, nor any combination thereof discloses or suggests each and every element of independent claim 1, namely, the feature requiring the ventilator unit to comprise a flow meter (29) disposed inside the duct (14) and a converter (50) adapted to transform an electrical signal into a sound signal, wherein said converter (50) is situated in said duct (14) so that the converter (50) is directly inside the fluid flowing in the duct of independent claim 1.

In the response filed April 11, 2008, Applicant presented this argument with respect to the combination of HOAGUE

and JENSEN. The Office only addressed this argument by stating that "Applicant's arguments with respect to claims 1-4 and 7-18 have been considered but are moot in view of the new grounds of rejection." See page 9 of the Office Action. Thus, it would seem that the Office is relying on the newly cited reference of BERGER as allegedly disclosing this feature of independent claim 1.

Applicant respectfully disagrees. Neither BERGER, HOAGUE, nor JENSEN, nor any combination thereof discloses, suggest or makes obvious this feature of independent claim 1, requiring a ventilator unit for ventilating the inside of a garment to comprise a flow meter (29) disposed inside the duct (14) and a converter (50) adapted to transform an electrical signal into a sound signal, wherein said converter (50) is situated in said duct (14) so that the converter (50) is directly inside the fluid flowing in the duct.

First, it should be noted that the primary reference of BERGER is not related to the subject matter invention of claim 1. In this regard, BERGER discloses an air flow measuring inlet cone for a centrifugal fan within a commercial ventilation system in a building and methods of measuring air flow therein. BERGER mentions nothing respect to ventilating the inside of a garment, such as a pressure suit or the like, as required in claim 1 of the instant application.

Moreover, there is no suggestion in BERGER that the teachings therein could be modified or even applied for use in a

garment. Clearly, a garment is a vastly different structure than a building. A ventilation system for a commercial building is not predictive for a ventilation system in a garment. There would be no reasonable expectation of success of modifying the teachings in BERGER for use in a garment. No reasonable rationale has been provided to combine the teachings of BERGER with that of HOAGUE and/or JENSEN.

Second, on page 3 of the Office Action, the Office stated that BERGER discloses:

> "a flow meter (30) disposed inside the duct (Fig. 1), said flow meter having an outlet (wire) suitable for delivering an electrical signal representative of the flow rate of fluid passing along the duct (14) (col.3 l.61-col. 4 l.10). . . and the flow meter (30) has a converter (converting pressure readings to airflow readings) being situated in said duct (14) so that the converter is directly inside the fluid flowing in the duct (Fig. 1)."

Applicants respectfully disagree and submit that BERGER fails to disclose or suggest that for which it is offered.

However, contrary to the Office's position, BERGER does not disclose a converter inside the fluid flowing in the duct. BERGER mentions nothing about a converter. Instead, BERGER discloses a flow meter/pressure sensor. However, the flow meter/pressure sensor (30) in BERGER is not inside the duct (14) in the ventilation system of BERGER. Rather, it is positioned on the outside of the central air station handler (120). This is

evident from the description at column 3, lines 60-65, wherein it is stated that

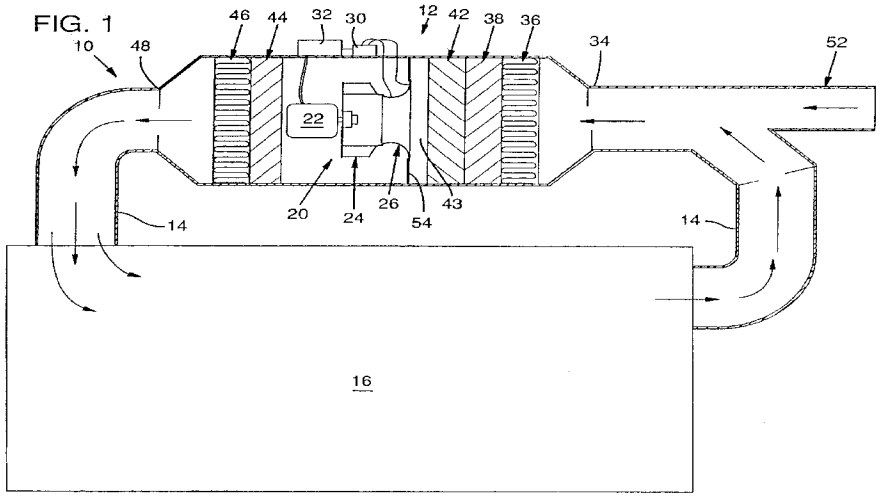
> "To monitor air flow through the ventilation system, a pressure sensor 30 is connected to detect and compare the pressure at the flared inlet to the inlet cone and at the throat of the inlet cone." [Emphasis added.]

This is even more evident in the description of Figure 1 at column 4, lines 15-20 of BERGER, which states:

> "In the illustrated example, air processed through the central station air handler 12 passes sequentially through: an air handler intake 34 connected to ductwork 14; an intake filter 36; an electric heater unit 38; a cooling coil 42; a plenum 43; the inlet cone 26; the bladed wheel 24; a sound trap 44; an output filter 46; and an outlet 48. The central station air handler 12 may also include other air processing components such as humidifiers."

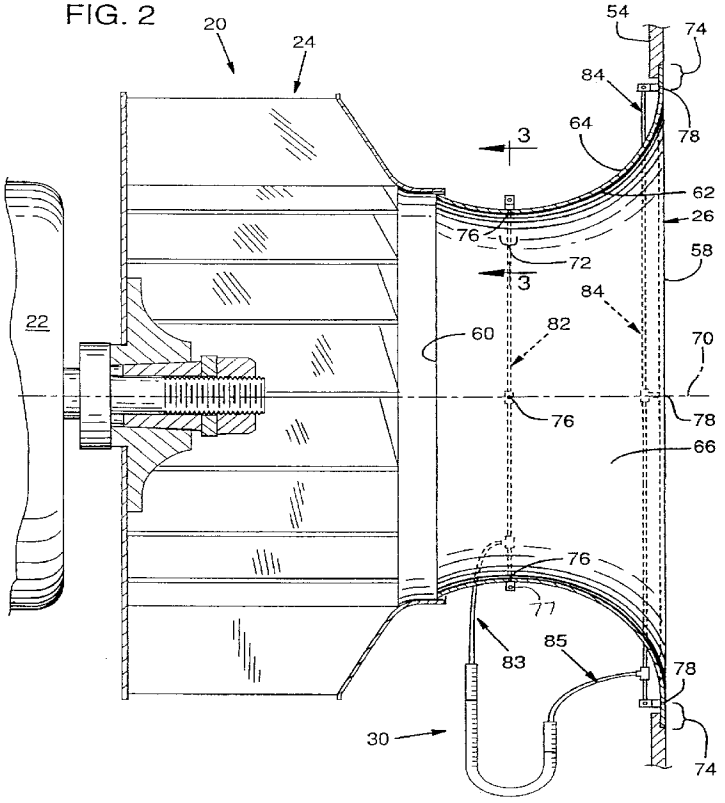
Based on this disclosure and a review of Figure 1 of BERGER, it is clear that the flow meter (30) is positioned on the outside wall of the central air station handler (12) and not on the duct (14) of the system in BERGER. Please see Figure 1 of BERGER as shown below that illustrates this point.

FIG. 1



In this Figure, it is clear that the duct (14) is not the central station air handler 12. See also Figure 2 of BERGER as shown below.

FIG. 2



At column 5, lines 1-6, BERGER discloses that the centrifugal fan (20) is arranged in the inlet cone (26) so that air reaching the fan (20) must pass through the inlet cone. At column 5, lines 28-31, it is disclosed that the cone (26) is provided with four static pressure taps (76) for detecting the static pressure at the throat (72).

Based on the above, it is clear that, in the system of BERGER, the flow meter (30) is positioned on the outside wall of

the central air station handler (12) and not on the duct (14) as required in claim 1 of the instant application. Moreover, nothing in BERGER discloses or suggests a converter inside the fluid flowing in the duct (14) as required in claim 1. For these reasons, BERGER clearly does not disclose or suggest the above-noted features of independent claim 1.

The secondary references of HOAGUE and JENSEN fail to remedy the deficiencies of BERGER.

With respect to HOAGUE, on page 5 of the Office Action, it was indicated that the invention is unpatentable over BERGER in view of the alarm of HOAGUE. However, as argued in the last response, HOAGUE does not teach a converter which is directly inside the fluid flowing the duct.

Again, a main characteristic of the invention is that the ventilator unit comprises a converter (50) adapted to transform an electrical signal into a sound signal, wherein "said converter (50) being situated in said duct (14) so that the converter (50) is directly inside the fluid flowing in the duct." See the last 2 lines of independent claim 1.

In the previous Office Action of January 11, 2008, the Office, in the paragraph bridging pages 7-8 of the Action, states:

> 2. Applicant contends that HOAGUE does not teach the converter being situated in the duct since it is not in the duct for the air stream. However, claims are afforded their broadest reasonable interpretation.

> In this instant application, claim 1 merely requires the converter is situated in said duct. There are three responses to this argument, first, the definition of a duct from www.dictionary.com 111/2008 is 1. any tube, canal, pipe, or conduit by which a fluid, air, or other substance is conducted or 2. conveyed or a single enclosed runway for conductors or cables. As shown by the second definition of a duct airflow does not have be present and that the converter is in duct 134. The second response to this argument is that the alarm (202) is connect to sense the air unit/filter assembly and though not shown in the drawing must have access to the airflow and be in the airflow duct (134), as explained in the Abstract of HOAGUE. The third response is, even if HOAGUE did not teach the sensor for the alarm (202) being in the airflow duct (134) the combination of HOAGUE in view of the flow meter of JENSEN certainly would teach the flow meter to being in the airflow of the airflow duct (134).

Applicant again disagrees with the Office's positions and characterization of HOAGUE and JENSEN.

As discussed in previous responses, it is not accurate to say that HOAGUE's converter is located in duct 130, because the converter, although located in unit 130, is not in a duct for the air stream. Unit 130 is only a housing 134 surrounding a part of the duct in which the air is flowing, and the converter 202 is located between the external wall of the duct and the internal wall of this part of the unit 130. In this part of the unit 130, the duct is the passageway of the air in the blower, and the wall of the duct is the wall of the blower 18.

Please see again the schematic attached to the last response showing an exploded longitudinal cross-sectional view of

HOAGUE's device. This schematic is based on Figures 1 and 2 of HOAGUE.

The shaded path on the schematic is the air stream or air duct in the air filter unit 130, and only this shaded path can be considered as an air duct. It comprises the main housing 134 and the passage duct into the blower 118, the blower being located in the housing 134, its input being connected to the main housing 134 as shown at 118, and its output being connected to the output 112.

The dividing wall between the housing 134 and the main housing 134 is the wall of the battery pack 120, the front face of the blower motor 118 (not shown in Figure 2) and the frame of the filter 124/128.

As can be seen from this schematic, it is not accurate to say that the second case is defined in HOAGUE as element 130 as a whole, in which the converter which Applicant says is the fan 118 is such but it is also in the duct or the airflow passageway located in case 130 between the orifice 112 and the outside of the first case 134. In fact, as can be seen from the schematic attached to the last response, and as evident from the disclosure in HOAGUE itself, the converter 202 in HOAGUE is <u>not in the shaded path</u>.

Further, the Office's argument that the definition of duct does not require air flow to be present stands in direct

contrast to claim 1, which clearly requires the converter to be inside the fluid flowing in the duct.

Furthermore, it is not accurate to say that all the filtered air is flowing in the two housings 134, that is, the housing 134 and the main housing 134. As previously argued in the last response, such an arrangement would not be considered since it would be dangerous to position all electric circuit boards, battery back, etc., directly in the flowing air that is breathed by a person. This is so because an explosion or a gas emanation, or an electric arc or the like could be very dangerous to the person, especially in the case of a device such as a head cover 102.

Consequently, as argued in the previous responses, the Office's characterization of HOAGUE is inaccurate as it would render the device in HOAGUE inoperable for its intended purpose. Again, it is well established that, if a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *See* M.P.E.P. § 2143.01, V. Thus, the Office's characterization of HOAGUE is inaccurate and would in fact teach away from claimed invention. The Office has yet to address this argument, which was raised in the last response.

Further, as discussed in the last response, as can be seen in Figure 2 of HOAGUE, the piezo alarm 202 is not in the air

stream or air duct, but only in the housing 134 outside the blower 118 and in no case inside the blower duct, as it is seen in full line on the rear view of HOAGUE. The Office has yet to address this argument.

Thus, nothing in HOAGUE discloses or suggests that the alert alarm is positioned in the air output duct.

Again, a main feature of the ventilator unit of claim 1 is that the sound converter is directly positioned in the fluid flowing in the duct which is passing through the housing of the ventilator. This configuration is important, because as sound is propagated in the fluid, and moreover in circulation, the person wearing the garment is informed earlier, providing even more safety, than when the audible alarm is only in the housing of the ventilator as in the devices disclosed in HOAGUE and JENSEN, and not in the fluid passing in the air duct.

At page 5 of the Office Action, it was indicated that HOAGUE teaches a "converter controllable from a control input, said converter being suitable for transforming an electrical signal into a sound signal". However, it is again noted that this converter is not inside the fluid flowing in a duct.

Again, the Office has not provided any rational basis showing that the sound converter in HOAGUE is in the duct, let alone, in the fluid flowing in the duct as required in claim 1. Nothing in HOAGUE, or for that matter JENSEN, suggests that the converter is in the flow of the fluid circulating in the duct.

Thus, the rejections fail, because neither BERGER, HOAGUE nor JENSEN, nor any combination thereof discloses or suggests each and every element of independent claim 1, namely, the feature requiring the ventilator unit to comprise a flow meter (29) disposed inside the duct (14) and a converter (50) adapted to transform an electrical signal into a sound signal, wherein said converter (50) is situated in said duct (14) so that the converter (50) is directly inside the fluid flowing in the duct of independent claim 1. As such, the cited references cannot render obvious claim 1. Thus, claim 1 and all claims dependent thereon are novel and unobvious over BERGER, HOAGUE nor JENSEN.

The obviousness rejections are believed to be overcome, and withdrawal thereof is solicited.

III. CONCLUSION

In view of the foregoing remarks, it is respectfully submitted that the present application is in condition for allowance and early notice to that effect is hereby requested. If the Examiner has any comments or proposals for expediting prosecution, please contact the undersigned attorney at the telephone number below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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